

Notice of Allowability

Application No.

09/675,811

Applicant(s)

CARMEL ET AL.

Examiner

Fred Ferris

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12 May 2005.
2. ☒ The allowed claim(s) is/are 3-6, 8, 10-14 now renumbered as 1-10.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 2/10/2005.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 5/12/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. *Amended claims 3-6, 8, and 10-14 have been presented for examination based on applicant's amendment filed on 12 May 2005. Applicants have canceled claims 1, 2, 7, 9, and 15-20. Claims 11-14 were previously allowed. Claims 3-6, 8, and 10 have now been allowed over the prior art of record.*

Response to Arguments

2. *Applicants arguments filed on 12 May 2005 relating to amended claims 3-6, 8, and 10 have been fully considered and found to be persuasive. The examiner now withdraws the prior art rejection of claims 3-6, 8, and 10 in view of applicant's amendment to the claims and arguments filed 12 May 2005.*

Allowable Subject Matter

3. *Claims 3-6, 8, and 10-14 are allowed over the prior art of record.*

The following is an examiner's statement of reasons for allowance:

Applicants are disclosing computer code for analyzing multiple scene graphs representing the scenes of a graphic image by comparison of the node properties of the interconnecting nodes. This has been disclosed in the prior art.

While these features are individually disclosed in the prior art, the prior art of record does not meet the conditions as suggested in MPEP section 2132, namely:

"The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913,

1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990)."

In particular, the prior art of record does not disclose the specific sequence of steps relating to associating by a neutral scene graph (NSG) each node of interconnected nodes in a first scene graph with nodes of a second scene graph and subsequently updating the second scene graph via a separate thread from the code representing instructions, or subsequently associating the NSG via interconnected nodes of a third scene graph independent of any connections between interconnected nodes of the first scene graph, as now recited in the independent claims 3 and 10 respectively. The examiner has interpreted the operation of the claimed neutral scene graph (NSG) as specifically defined in applicants specification on page 53, line 1 to page 55, line 25, page 84, line 5 to page 94, line 23, and Figure 1.

The closest prior art uncovered during examination teaches certain limitations of the claimed invention as follows:

- U.S. Patent 5,896,139 issued to Strauss teaches analyzing the interconnecting nodes of multiple scene graphs and a new (second) scene graph representing the scenes of a graphic image but does not explicitly teach the sequence of associating by a neutral scene graph (NSG) each node of interconnected nodes in a first scene graph with nodes of a second scene graph as now recited in independent claims 1 and 10.

- U.S. Patent 6,266,053 issued to French et al teaches time based mapping between scene graph nodes but does not explicitly teach the sequence of associating by a neutral scene graph (NSG) each node of interconnected nodes in a first scene graph with nodes of a second scene graph. The examiner has interpreted the operation of the claimed neutral scene graph (NSG) as specifically defined in applicants specification on page 53, line 1 to page 55, line 25, page 84, line 5 to page 94, line 23, and Figure 1 in distinguishing the synchronization operation of the claimed neutral scene graph (NSG) over the time-based scene graph synchronization mapping technique disclosed by French.

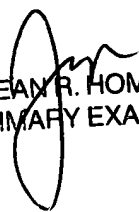
The features noted above relating to the specific sequence of steps for analyzing interconnecting nodes of multiple scene graphs using a neutral scene graph (NSG) renders independent claims 1 and 10 non-obvious over the prior art of record. Claims 4-5, and 8 are deemed allowable as being dependent from independent claim 3. Claims 11-14 are allowed over the prior art of record since the prior art does not disclose the specific sequence of steps relating to determining the existence of a **contact state** between the **first and second virtual representations** and determining if the contact state meets a **predetermined threshold number** of contact states in determining **the minimum drop angle parameter** as recited in the limitations of independent claim 11. In this case the examiner has interpreted the determination of the claimed "contact state" and "minimum drop angle" to be as defined in applicants specification on pages 9-15, 17, 18 and in Figures 2 and 3. Dependent claims 12-14 are deemed allowable as being dependent from independent claim 11.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 571-272-3778 and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 571-272-3700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere can be reached at 571-272-3780. The Official Fax Number is: (703) 872-9306*

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JEAN R. HOMERE
PRIMARY EXAMINER